Meeting the Challenge of the California Bay Delta
An Integrated Federal Strategy

November 6, 2010 Draft

Introduction

The California Bay Delta is in crisis. The ecological productivity of the Delta is dismal and declining; the vulnerability of the water supply system to inevitable earthquakes is immediate and unsustainable, and the reliability of the water supply system overall is marginal and unacceptable. The implications of these circumstances are far reaching for the communities in and around the Delta and for California as a whole. The challenge is multi-faceted, complex and difficult. It is also unavoidable, and demands a firm response from many interested participants, including Federal, state and local governments, the water users, both agricultural and municipal, and from the many non-governmental organizations that are deeply committed to the Delta in all its many aspects.

The Obama Administration has from the outset recognized the enormity of the Delta challenge, and has responded in a tightly organized and disciplined fashion to it. Secretary Salazar, along with Secretary Locke, the Chairwoman of the President's Council on Environmental Quality and many others, formed a cabinet-level Interagency Task Force which released an Interim Action Plan for the Delta in 2009 that called for a broad array of initiatives to address these challenges. This report summarizes the progress and accomplishments to date, and also outlines important priorities for the Federal agencies in the coming months. Its purpose is to provide a status report on these efforts to the public as a whole and to the many participants in these Delta-related endeavors in order to promote continued close coordination. It is also intended to serve as a useful tool to assist as the State of California transitions to a new Governor and state Administration.

Prospects and Initiatives for 2011

1. **Annual Water Planning.**
   a. Increase the frequency and accuracy of early spring forecasting to improve water supply planning;
   b. Review 2010 operations and identify adjustments in the implementation of the fish protection measures to improve the efficiencies of the overall operations for 2011,
   c. Commence work on a pilot project to integrate the flood- control operations of the Corps of Engineers with the water management strategies of the state and federal water projects to improve the overall efficiency of use of available water for multiple beneficial purposes;
   d. [insert other measures].

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2. **Near-term Science Initiative.** The Federal agencies will be pursuing a suite of near-term science initiatives over the course of 2011 focused on turbidity and sediment transport studies intended to improve our understanding of key triggers and decision criteria in the current BiOps that affect water operations. It is also intended to provide a basis for evaluating the viability of turbidity management approaches to controlling delta smelt entrainment. All near-term studies are expected to produce results in 2011. Two are monitoring projects that will produce data in 2011 and may be supported for additional years as circumstances warrant. All of the integrated BiOp support studies are intended to support both BiOp preparation and subsequent adaptive management, and three of the four have three-year planned durations. The fourth is a monitoring project with annual data reports and an expected duration of six years.

3. **Developing an Integrated BiOp.** The FWS and NOAA Fisheries are preparing to undertake an integrated BiOp with the BOR in direct response to recommendations from the National Research Council, and building off of the near-term science initiative, noted above.

Constructing a Long-term Conservation Plan for the Delta: Federal Perspectives on the Bay Delta Conservation Plan (BDCP)

For the past four years and under the leadership of Governor Schwarzenegger and his team, significant progress has occurred in the development of a long term, comprehensive approach to rebuilding the health of the California Bay Delta and establishing a stable framework through which to achieve significant improvements in water supply reliability. As active partner in these efforts, the Federal agency participants endorse the effort, the progress to date, and the major components of the planning effort to date, as enumerated below.

First Principles - The Federal Agencies:

a. Actively support the dual objectives of the BDCP of restoring the ecological health of the Delta and water supply reliability for the agricultural and municipal communities which depend upon it for all Californians.
b. Support the continued completion of a comprehensive plan that will meet these goals through a multi-party planning effort, as represented by the BDCP. The Federal partners stand ready to continue with their active and constructive participation.
c. Affirm their commitment to the use of best available science in addressing the complexities of these Delta challenges, and stand ready to devote their expertise and scientific capabilities towards that end. The Federal agencies are committed to a scientifically sound and legally defensible BDCP.
d. Support open public processes and reviews over the course of the planning process to

improve the outcomes of it and promote the likely implementation of them through broad public understanding of and support for them.

Core Elements of the Proposed Plan

e. **Scope and structure of the BDCP:** The Federal agencies concur with the scope and structure of the BDCP as currently crafted, including the major program components of its conservation strategy.

f. **Governance:** The Federal agencies believe that substantial progress has been achieved in fashioning a proposal for a governance structure to guide the implementation of the plan. The agencies concur with key elements of the governance proposal, and look forward to continuing refinements as necessary over the course of the planning process.

g. **Goals and Objectives:** The Federal agencies concur with the basic hierarchetical architecture of the goals and objectives of the BDCP as currently enumerated and believe they represent a rigorous, scientifically well-grounded approach to guide plan implementation. As recognized by many of the parties, substantial further work is required to lend specificity to the metrics that will inform the various tiers of the architecture. The agencies believe that further rapid progress in developing these metrics based upon the recent recommendations of the BDCP science panel is important. The agencies believe that these metrics should be framed quantitatively where existing information allows, and should tie back into and reflect the ability of the plan to meet plan objectives over time, and should also directly tie into the monitoring programs designed to track and evaluate implementation of the BDCP program. Additionally, the agencies believe that these metrics should also be subject to adjustments as learning increases through implementation, given the substantial uncertainties that exist around them.

h. **New North Delta Conveyance**: The Federal agencies strongly support the development of a new north Delta conveyance and believe this will provide additional operational flexibility to meet the dual goals of ecological health and water supply reliability. The agencies have no objections to the sizing and routing of the proposed new facility, subject to the following understandings.

First, a major Federal interest associated with the proposed new facility which is pertinent to the sizing issue relates to the performance of the diversions and screening structures themselves. A parallel interest of primary importance is the operational rules governing these diversions. Both are closely related. The scale of these diversion structures is unprecedented, and they pose significant engineering

challenges well recognized by the parties. In light of these uncertainties, the Federal agencies anticipate that solutions will continue to evolve during and after the planning process, and support retaining the flexibility to adapt to these new solutions as they evolve. The agencies also recognize the importance of regulatory certainty to the BDCP, and the ability to authorize at the outset a facility of full capability should circumstances warrant; partial regulatory authorizations only at the outset of the program could significantly impair the ability to secure the necessary financing for it.

Therefore, the Federal agencies intent at this juncture to recommend a performance-standards approach to the issue of diversion structures, whereby the plan would establish firm operational performance standards governing the diversions, and expressed in terms of screening performance criteria, bypass flows, predation rates and other relevant metrics that will account for the direct and indirect effects of the diversions. Once these performance standards are articulated, the parties will be accorded considerable engineering flexibility to design, build, test, and adjust those designs, to meet these performance standards. Full build-out of the diversion capacity of the system will be conditioned on the demonstrated ability of the diversion structures, individually and cumulatively, to meet these diversion standards. As a corollary to this approach, the Federal agencies suggest a phased approach to the design and construction of these facilities in order to enable experience to teach and to avoid stranded investments.

The second important parameter associated with the sizing topic pertains to the operational parameters associated with the diversion, even assuming that the intakes and screens are operating to performance standards. This topic is addressed in the discussion of long-term operations, below.

i. **Long-term Operational Criteria**. A central feature governing the acceptability of a final BDCP program turns around the long-term operational criteria that will govern how the water management system of the CVP and the SWP are operated because these operational criteria directly and substantially affect the ability of the plan to achieve its dual goals. The current proposed long-term operations criteria are being modeled and evaluated by the effects analysis processes of the BDCP, along with a range of alternative criteria. That work remains underway, and constitutes a precursor to delineating firmly a set of operational criteria to govern the system for the long-term. In framing a set of long-term operating criteria, the Federal agencies support the concept of establishing a broad adaptive management range (sideboards) with an initial adaptive management operational range within the broad adaptive management sideboards, and an initial operation within the operational range.

j. **Habitat Restoration.** The Federal agencies support the multiple components of the

habitat program as currently conceived. The agencies further acknowledge that the predictability and quantification of the ecological benefits anticipated from these program elements vary across the various habitat types, as recognized by the parties and others, including the National Academies of Sciences recent report on the Delta and other outside science authorities. Therefore, the agencies furthermore support early starts to such efforts, as called for by the current biological opinions governing project operations, and the implementation of a rigorous monitoring program to track results. The agencies further commend retaining the flexibility in adjusting habitat investments over time as the results may indicate. [Add more on anticipated effects on water supplies.]

k. **Other Stressors.** The Federal agencies encourage the pursuit of actions to address the multiple other stressors that may affect the ecological productivity of the Delta, as currently enumerated by the proposed plan. The agencies note the considerable uncertainties associated with these actions as currently framed, and encourage the continued refinement of them over the course of the planning process to enhance their specificity, the likelihood of benefits ensuing from them, and their ultimate ability to serve as specific conservation measures with discernible benefits in the final plan. They remain an important work in progress.

l. **Adaptive Management**. The Federal agencies concur with the general framework of the Adaptive Management Plan as currently conceived by the BDCP and believe it contains the essential components to guide the implementation and adjustment of the plan over the course of implementation. The essential next steps in framing the program, as recognized by the parties, is the infusion of the metrics and monitoring components for it, and the appropriate triggering mechanisms for adjustments, as implementation proceeds. The agencies concur that steady progress on this plan component is essential.

m. **Regulatory Certainty and Assurances**. The Federal agencies recognize that the stability of plan implementation is directly associated with the assurances that its implementation will be predictable and reliable, and that the water supply reliability elements are intact. The Federal agencies are committed to providing those assurances, taking into account and building into them the uncertainties associated with the ecological benefits that will ensue. The agencies therefore stand ready to formulate these assurances as the components of the plan materialize and as the effects analyses of the proposed plan mature.

Next Steps

n. **Continue with Collaborative Planning.** The Federal agencies strongly support

proceeding aggressively with the completion of the conservation planning process in the belief that a comprehensive approach to the challenges of the Delta is much preferred. The agencies further believe that a collaborative approach to planning represents the best approach to success. The agencies recognize that the current BDCP process has been admirably led by the State of California. In due respect to the new in-coming administration, the agencies recommend that it, or its function equivalent, continue aggressively to complete the planning for a legally defensible and scientifically sound conservation plan for the Bay Delta.

o. **Complete and Refine a Robust Effects Analyses.** All of the parties recognize the essential role of a scientifically robust analysis of the effects of the proposed plan and alternatives to it in order to inform good decisions and to ensure that they are scientifically sound and legally defensible. The Federal agencies recognize the difficulties of this task given the limited information available on certain elements of the plan. The agencies believe that substantial additional refinements in the effects analyses are appropriate to meet these objectives, and are committed to working with the parties towards that end. To date, because of schedule constraints and other factors, the relatively coarse scale of the hydrological, biological and ecological analyses have been insufficiently refined to support a refinement of the major plan comments generally, and the operating parameters in particular. The Federal agencies look forward to continued refinements in the effects analyses as they occur, and to adjustments in plan elements accordingly.

p. **Analyze a Full Range of Alternatives** As the planning process proceeds, substantial work is already underway to develop a reasonable range of alternatives to the proposed plan for further environmental analysis. Since the proposed plan itself will be composed of several major program elements, as noted above, the Federal agencies along with the other parties are dedicated to ensuring a wide range of those major components are properly described and considered, including important topics of the sizing and routing of the new conveyance; design and configuration of the diversion structures associated with the new conveyance; the scale and scope of the habitat program, the approaches to addressing other stressors and the range of operating scenarios that are examined. The federal agencies remain committed to the evaluation of a full range of alternatives as the planning process proceeds in order to improve the outcomes of it.

Other Federal Initiatives

1. **Encourage Improved Supply and Use of Bay-Delta Water by Strengthening Federal Water Conservation Efforts- BOR, EPA, USACE and USDA**

- A Federal interagency team is pursuing a range of projects aimed at improving water infrastructure, designing energy and water audits, coordination of water conservation and recycling efforts in the Central and West Coast groundwater basins, and improving groundwater quality, optimizing storage and distribution of water and developing backup supplies in the San Gabriel Valley.
- The USDA Natural Resources Conservation Service is working to improve and protect the health of the Sacramento and San Joaquin River headwaters and surrounding forest lands by restoring resiliency of forests to reduce the threats of catastrophic fire and by increasing water storage capacity and the attenuation of flows through wet meadow restoration.
- In FY 2010, the USDA NRCS's several environmental quality enhancement programs benefited 915,205 acres in the Bay-Delta area with an additional $21.3 million for Wetlands Reserve Program (WRP). The Recovery Act also funded Floodplain Easements (FPE) for $3.8 million. This increased WRP and FPE funding benefited 7,466 acres of wetland and riparian areas in the Bay-Delta.

2. **Address Other Stressors Affecting Bay Delta Species.**
   - EPA is publishing an Advanced Notice of Proposed Rulemaking (ANPR) that addresses beneficial water uses in the Bay-Delta in terms of water quality standards. Pollutants addressed in this product include ammonia, selenium, emerging contaminants such as endocrine disruptors, salinity, and potential interactive effects between contaminants.

   - EPA is developing a general NPDES permit for pesticide applicators, which will affect the level of contaminants, a major stressor on listed species, in the Bay-Delta. NOAA Fisheries is consulting on EPA's registration of several pesticide, herbicide, and fungicide chemicals to evaluate and address their impacts on ESA-listed salmonids to ensure they do not jeopardize the continued existence of these species or adversely modify critical habitat.

   - EPA's has published a proposed rule on ballast water, developed in conjunction with the U.S. Coast Guard, to reduce the risks of introducing or spreading invasive species into the Delta from vessel ballast water releases.

3. **Accelerate Construction and Upgrade of Facilities to Restore Delta Smelt and Other Native Aquatic Species.**
   - USFWS is providing leadership and technical assistance to maintain a backup interim delta smelt refugium and develop a long-term refugial solution. FWS is

working with DWR, BOR, and DFG to identify funding to upgrade the facility including improving emergency power and redundant water supply. FWS also worked with DFG, BOR and UC Davis on a proposal to secondary refuge facility is operated by FWS Region 8 at Livingston Stone National Fish Hatchery. The proposal aims to fully fund operations as part of FY11 Treasured Landscape Proposal and again in FY12 through an ecosystem management proposal.

- USFWS, BOR and DFG are working together to promote development of a Delta Fish Restoration Facility. FWS has completed all the preliminary planning and are working with the City of Rio Vista for sighting a future facility.

4. **Prioritize the Construction of Facilities that Reduce Fish-Water Supply Interactions**
    - BOR has prioritized the construction at the Red Bluff Fish Passage and Contra Costa Fish Screen. Construction is ongoing at these two locations, as intended. Patterson Irrigation District, whose Fish Screen was another priority facility under the Interim Plan, also received notice to proceed with construction in 2010.

[Other Initiatives??]

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